

CLAIMS

1/ A hot marking method enabling decoration to be made on an article, the method comprising the steps consisting in:

- 5 · supplying a multilayer structure comprising a layer of varnish that hardens under the effect of radiation, a backing layer, and a layer of decoration, the varnish layer being situated between the backing layer and the decoration layer;
- 10 · bringing said multilayer structure into contact with the article;
- 15 · applying pressure and heat to the backing layer at the location where it is desired to transfer the decoration layer onto the article, the varnish layer being such as to be transferred locally onto the article together with the decoration layer;
- 20 · withdrawing the backing layer; and
 · causing the layer of varnish that has been transferred onto the article to harden by exposing it to said radiation.

2/ A method according to claim 1, wherein the varnish used is a UV thermal varnish.

25 3/ A method according to claim 2, wherein the varnish used is a cationic UV thermal varnish.

30 4/ A method according to claim 2, wherein the varnish used is a hydroxylated urethane acrylate UV thermal varnish.

5/ A method according to claim 1, wherein the varnish includes oligomers of low molecular weight, preferably lying in the range 800 to 2000.

6/ A method according to claim 1, wherein the varnish contains a solvent prior to being applied to the backing layer.

5 7/ A method according to claim 1, wherein the varnish includes one or more pigments or dyes.

10 8/ A method according to claim 1, wherein the varnish includes photo-initiators at a concentration by weight that lies preferably in the range 0.3% to 3%, and preferably about 0.5%.

15 9/ A method according to claim 1, wherein the backing layer is constituted by a polyester film.

10 10/ A method according to claim 1, wherein the decoration layer is covered in a layer of hot-melt adhesive.

20 11/ A method according to claim 1, wherein the varnish layer is exposed to said radiation while its temperature is still close to its maximum temperature at the moment when pressure and heat are applied to the backing layer, the temperature difference being preferably less than 30% of the maximum temperature.

25 12/ A method according to claim 1, wherein the decoration layer is a layer of metal deposited under a vacuum onto the layer of varnish before the varnish is exposed to said radiation.

30 13/ A method according to claim 1, wherein the decoration layer is a layer of ink deposited by printing on the layer of varnish before the varnish is exposed to said radiation.

35 14/ A multilayer structure for implementing the method as defined in claim 1.

- 15/ A multilayer structure for implementing a hot marking method, the structure comprising a layer of varnish that hardens under the effect of radiation, said varnish being unexposed to said radiation, a backing layer, and a layer of decoration suitable for being transferred locally onto an article by applying heat and pressure to the backing layer.

10 16/ A multilayer structure according to claim 15, wherein the decoration layer is covered in a layer of hot-melt adhesive.

15 17/ A multilayer structure according to claim 16, wherein the varnish used is a UV thermal varnish.

20 18/ A multilayer structure according to claim 17, wherein the decoration layer is a layer of vacuum-deposited metal.

19/ A multilayer structure according to claim 15, wherein the decoration layer is a layer of ink deposited by printing.

25 20/ An article having decoration applied thereto by a hot marking method as defined in claim 1.

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